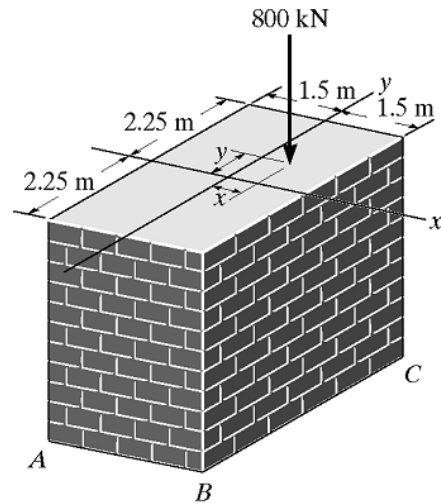


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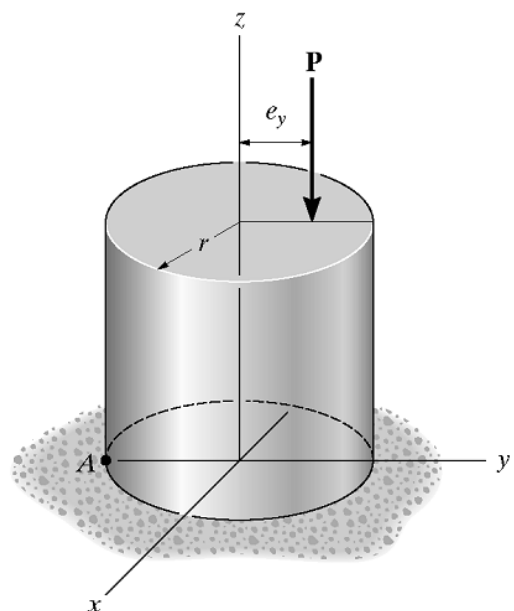
Student ID:

M23: Core Area of Compression

1. The masonry pier is subjected to the 800-kN load. Determine the equation of the line  $y = f(x)$  along which the load can be placed without causing a tensile stress in the pier. Neglect the weight of the pier.



2. The cylinder of negligible weight rests on a smooth floor. Determine the eccentric distance  $e_y$  at which the load can be placed so that the normal stress at point A is zero.】



Name:

Student ID:

M23: Core Area of Compression

3. The stepped support is subjected to the bearing load of 50 kN. Determine the maximum and minimum compressive stress in the material.

